Technical Information

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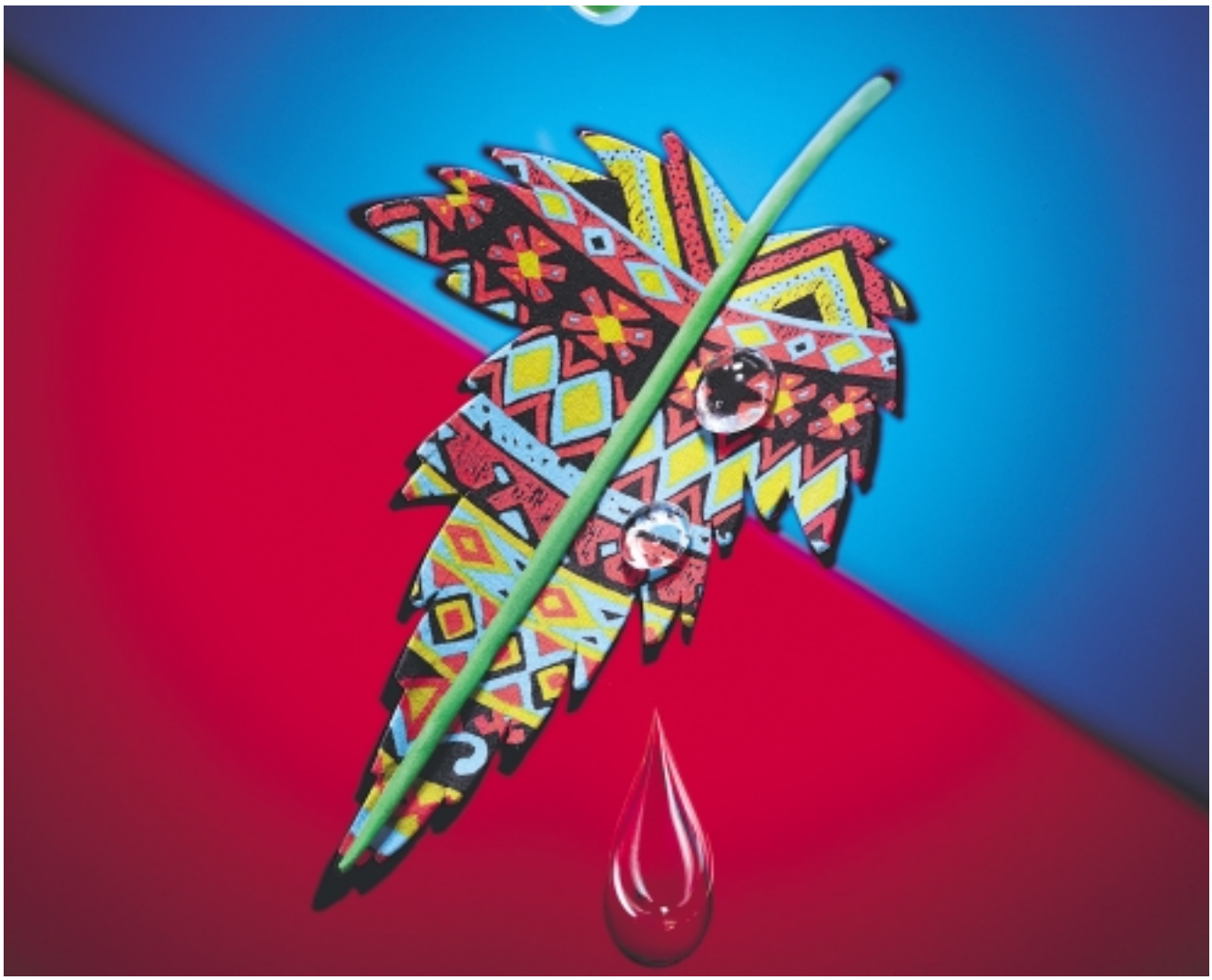
BASF auxiliaries for textile printing

Short description of the auxiliaries used in textile printing and its accompanying processes

General survey of the textile auxiliary ranges supplied by BASF

brilliant SOLUTIONS...
WITH TEXTILE CHEMICALS
FROM BASF



Colorants and Finishing Products

BASF

Short description

(Explanation of the fibre name abbreviations: page 11)

Albigen® A	Polyvinylpyrrolidone solution. Auxiliary with great affinity for dyes. Albigen A prevents staining of the ground in the washing-off process after printing with direct and reactive dyes.
BASF Liquid Reactive Resist Agent	Sulphonic acid derivative. For producing white and coloured resists, for example with Procion® PX and P dyes under Basilen® F dyes. Offers the following advantages: simple application, reliable procedure, versatility and maximum brilliance of the effects.
Basilen Fixing Agent F-RP New	Sodium salt of chlorinated and non-chlorinated organic acids. Alkali donor for Basilen F dyes in resist printing and in direct printing.
Cyclanon® PE-Jet	Mixture of aliphatic ethoxylation products and a phosphoric acid ester. Low-foaming auxiliary for the reduction clearing of dyeings and prints on PES fibres and blends of PES with wool and with cellulosic fibres. Owing to its low foam formation it can also be used in partially flooded jet dyeing machines.
Cyclanon R	Mixture of a reducing agent and a nonionic dispersing and softening agent. Liquid auxiliary for the reduction clearing of dyeings and prints produced with disperse dyes on synthetic fibres. Stable to air and moisture. Reduces dyes in the presence of alkalis, disperses dye decomposition products and softens the fibre material. Good biodegradability.
Cyclanon V **Cyclanon K**	Auxiliaries for preventing a reduction in the fastness of dyeings and prints produced with azo disperse dyes on PES and PES/CO blends as a result of thermomigration.
Decrolin®	Zinc salt of hydroxymethanesulphinic acid. Discharging agent in textile printing, particularly for white discharge and white discharge-resist prints on synthetic fibres, wool and silk and for high-solvent pigment discharge printing.
Defoamer TC*	Highly effective, silicone-free defoamer for pigment printing. Prevents foam formation in the preparation of stock pastes and deaerates the print pastes during the printing process, thus preventing the occurrence of foam streaks.
Dekol® SN	Anionic polyacrylate compound. Dispersing agent and protective colloid in the dyeing of cotton and cotton/synthetic fibre blends with vat, reactive, direct and sulphur dyes. Non-foaming and non-retarding. Prevents the separation and filtering-out of the impurities from the cotton (pectins, waxes, water hardness salts) and of the dye adducts formed with these impurities. In printing, Dekol SN is used for washing off reactive prints.
Eulysin® S	Mixture of dicarboxylic acids in flake form. Used in dyeing and printing as a non-volatile acid in place of acetic acid, both in long liquors and in continuous dyeing and carpet printing.
Glyezin® A	Thiodiglycol. Dye-dissolving and fixing agent in textile printing with soluble dyes and with vat dyes.
Glyezin BC	Ethoxylated alcohol, nonionic. Auxiliary for dissolving acid, metal complex and direct dyes in the printing of PA, wool and silk. For coloured resist and flushed prints with Procion PX and P dyes and with Basilen F dyes. Promotes penetration of the prints.

* *Sold by TENSID Chemie, Cologne*

Helizarin® Binder ET

Aqueous dispersion of a copolymer based on an acrylic acid ester.
Binder for solvent-free and solvent-based pigment printing. The prints have excellent fastness properties and a soft handle.

Helizarin Binder TW

Aqueous acrylate-based dispersion.
Binder for solvent-free and low-solvent pigment printing (up to 250 g/kg white spirit). The prints are fast to dry cleaning and have an extremely soft handle. Largely compatible with electrolytes, thus universally usable. Should always be used in conjunction with Luprimol® SIG or Luprimol SE. Main fields of application: terry fabrics, knitted fabrics, flannelette prints.

Helizarin Binder UD

Aqueous dispersion of a thermally crosslinkable acrylate copolymer.
Universally usable printing binder, primarily for high-solvent direct printing, discharge printing and coloured resist printing. Normal handle. Prints are not fast to dry cleaning.

Helizarin Binder UDR

Aqueous dispersion of a thermally crosslinkable acrylate copolymer.
Used in solvent-free and low-solvent pigment printing. Has only a very slight influence on the viscosity of synthetic thickeners. The prints have a soft handle and very good general fastness properties. Their fastness to dry cleaning is limited.

Helizarin Binder 4574

Aqueous dispersion of a thermally crosslinkable acrylate copolymer.
Concentrated binder for solvent-free and low-solvent pigment printing with only a very slight influence on the viscosity of synthetic thickeners. The prints have very good general fastness properties and a soft handle. Their fastness to dry cleaning is limited.

Helizarin Bronze Binder MT

Ready-to-use solvent-free binder/auxiliary preparation based on an acrylate polymer dispersion that already contains all the components necessary for producing high-quality bronze and pearlescent prints.

Helizarin Fixing Agent LF

Melamine-based crosslinking agent for improving the fastness of pigment prints, chiefly on synthetic fibres and regenerated cellulose fibres and their blends with cotton. For prints with a low formaldehyde content.

Helizarin Special Binder 4438

Ready-to-use solvent-free paste for producing brilliant coloured prints of good opacity on dark grounds. Also excellent for sealing one side of the fabric in the production of double-face prints.

Hydrosulphite Conc. BASF

Sodium dithionite.
Reducing agent for the textile industry. Used as a reducing agent for vat dyes and for the reduction clearing of dyeings and prints produced with disperse dyes on PES and CTA. Also for stripping dyeings on cellulosic fibres and prints that have been produced with vat, reactive or direct dyes. For removing dye stains from dyeing equipment, etc.

Hydrosulphite F Conc. BASF

Hydrosulphite F Conc. BASF differs from Hydrosulphite Conc. BASF only in its lower bulk density.

Kieralon® B High Conc.

Synergistic mixture of nonionic and anionic products.
Excellent detergent with good dispersing power. Optimum effectiveness in hot alkaline liquors. The product is therefore particularly suitable for use in kiering and boiling-off processes, as a wetting agent and detergent in bleaching, and for aftersoaping of dyeings and prints on cellulosic fibres.

Kieralon DB

Mixture of nonionic and anionic surfactants and dispersing agents.
Low-foaming, APEO-free washing-off agent for prints, coloured woven fabrics and dyeings. Excellent wetting action, even at elevated temperatures. Pronounced detergency and dispersing action, hence very good removal of print thickenings and unfixed dye from the fibres. Primarily for the washing-off and reduction clearing of PES and CTA and for the washing-off of PES/CO (reactive and disperse dyes), of CA and PA (acid dyes) and of cotton and viscose (reactive and vat dyes).

Kieralon OLB Conc.

Mixture of nonionic and anionic components.
APEO-free, low-foaming wetting agent and detergent with a high emulsifying action.
Detergent for all types of fibres, particularly for removing oily, fatty and waxy impurities and for washing-out spin finishes and water-soluble sizes. Excellent stain remover.

Laventin® CW

Alkanol polyglycol ether, nonionic.
Highly concentrated wetting agent and detergent for washing all types of fibres. In automated thickener preparation units Laventin CW causes swelling of Lutexal® HDL. Optimum application temperatures for washing are above 40 °C. Biodegradable.

Leophen® M

Neutral phosphoric acid ester with nonionic emulsifiers.
In special cases it can be used as a wetting agent in the print paste when the fabric to be printed is difficult to wet or closely woven. Has a foam-suppressing and deaerating action.

Leophen RBD 1495

Dialkyl sulphimide, anionic
Very good rewetting agent, e.g. for printing on terry fabrics. Before being printed, the fabric is padded with the product and then dried. Rapid wetting agent for all types of textiles. Effective in both neutral and alkaline baths.

Lubasin® RF New

Special screen-printing adhesive for gumming down woven and knitted fabrics made of synthetic fibres to the blanket on rotary screen printing machines. Viscous solution, which is diluted with water or alcohol before use. Since the product becomes insoluble at temperatures above 30 °C, only cold water should be used for diluting it and for washing the printing blankets. Below 30 °C Lubasin RF New becomes water-soluble again.

Lubasin S New

Viscous solution of a polymer. Special adhesive for gumming down fabrics made of synthetic fibres to the blanket on screen printing machines. The fabric can either be stuck direct to the printing blanket or laminated to a cotton back grey. Lubasin S New becomes water-insoluble above 30 °C but regains its solubility in water below 30 °C. Therefore only cold water should be used for diluting the product and for washing printing blankets.

Lubasin TP

Thermoplastic adhesive for textile printing. Lubasin TP is insoluble in water and is therefore diluted with ethyl acetate before use. When cold, the layer of adhesive applied is non-adhesive and can therefore be cleaned with cold water even under severe mechanical stress. On heating, the full adhesive power is restored.

Ludigol® Granules
Ludigol Liquid

Oxidising agents for the textile industry. Auxiliaries for preventing any undesired reduction of dyes (e.g. of reactive and disperse dyes) and for reoxidising prints and dyeings produced with vat dyes. When padded onto discharge grounds (“Ludigolising”) they prevent the reduction of the ground shade during the printing process and in steaming. Lugidol Granules are non-dusting.
Usual application rate: 10 g/kg Ludigol Granules.

Luprimol SE

Silicone-oil-based handle modifier for solvent-free and solvent-containing pigment printing. Improves the fastness of the prints to dry rubbing and gives them a smooth, soft, dry handle. The product disperses very readily in solvent-free pastes.

Luprimol SIG

Silicone-based auxiliary for improving quality in pigment printing. In particular it improves the fastness of the prints to dry rubbing and produces a pleasantly dry, soft, non-tacky handle. In many cases it has a beneficial effect on the brilliance. For use in solvent-free formulations it should be incorporated with a good high-speed stirrer to ensure homogeneous distribution.

Luprimol D

Dicarboxylic acid ester.
Softener for pigment printing. Gives the prints a pleasant, soft handle and improves the brilliance and depth of shade of the prints, especially in solvent-free pigment printing. Used particularly in printing on terry fabrics and flannelette. Phthalate-free.

Luprimol U

Dicarboxylic acid ester.
Softener for pigment printing. Gives the prints a pleasant, soft handle and improves the brilliance and depth of shade of the prints, especially in solvent-free pigment printing.

Luprintan HDF

Fatty acid derivative.
Fixing agent for the HT steam and hot air fixing of disperse dyes in direct printing on PES and CTA.

Luprintan PFD 97

Organic compound containing nitrile groups.
Fixing agent in the printing of PAN fibres. Increases the colour yield of prints produced with basic dyes.

Luprintol® FBT

Copolymer, nonionic.
Film former for the printing of transfer papers with Bafixan® dyes.

Luprintol MCL

Silicone-containing emulsifier and auxiliary combination for simplifying the preparation of solvent-free and low-solvent pigment print pastes. Luprintol MCL enables high-quality pigment prints with a low formaldehyde content to be produced. APEO-free.
Application concentration: 20 – 25 g/kg.

Luprintol MP

Mixture of nonionic, APEO-free emulsifiers for solvent-free and low-solvent pigment printing.
Luprintol MP allows the amount of thickener to be reduced, improves the running properties of the print pastes and facilitates cleaning of the screens. In automated thickener preparation units Luprintol MP shortens the swelling time of Lutexal HDL.
Application concentration: 10 –15 g/kg.

Luprintol PE New

Aryl polyglycol ether.
APEO-free emulsifier for the preparation of thickener emulsions or solvent-free print thickenings for direct, discharge and resist printing with pigments and for bronze prints. Print pastes prepared with Luprintol PE New have outstanding stability and excellent running properties.
Usual application concentrations: solvent-free 5 g/kg, solvent-based 7 –10 g/kg (depending on white spirit content).

Luprintol SL

Auxiliary combination containing a crosslinking agent for low-formaldehyde pigment printing. APEO-free. Luprintol SL simplifies print paste formulation, improves the running properties and increases the fastness, particularly on synthetics and their blends. Prints produced with Luprintol SL have low formaldehyde values (measured by all test methods, e.g. LAW 112). The product is suitable for automatic metering systems.
Luprintol SL is used in amounts of 10 – 20 g/kg.

Lutexal® HDL

High-polymer synthetic thickener for solvent-free and low-solvent pigment printing. Specially developed for use in automatic mixing units.

Lutexal HEF

High-polymer synthetic thickener for solvent-free and low-solvent pigment printing. Print pastes produced with Lutexal HEF have very good running properties and give level prints with sharp outlines. Lutexal HEF is highly suitable for the supplementary thickening of print pastes.

Lutexal HIT

High-polymer synthetic thickener for solvent-free and low-solvent pigment printing. Imparts excellent running properties to the print pastes and gives the prints sharp outlines and brilliance. Suitable for the supplementary thickening of print pastes and for solvent-free pigment discharge and resist printing under reactive dyes.

Lutexal HP

High-polymer synthetic thickener for solvent-free and low-solvent pigment printing. Lutexal HP permits the simple and reliable preparation of print pastes that have good running properties and produce brilliant prints with very good levelness and excellent definition. Lutexal HP is highly suitable for the supplementary thickening of print pastes.

Lutexal HVW

Higher-molecular ethylene oxide adduct.
Auxiliary for pigment printing, where it serves to modify the rheology and viscosity of print pastes. In solvent-free printing Lutexal HVW improves the definition of the prints.

Reactive Resist Agent

see BASF Liquid Reactive Resist Agent

Rongalit® C	Sodium salt of hydroxymethanesulphinic acid. Reducing and discharging agent for textile printing. Can be used for direct printing with vat dyes on woven and knitted fabrics made of cellulosic fibres and as a discharging agent for white and coloured discharge prints on dischargeable dyeings on cellulosic fibres. Rongalit C can also be used in the kier-boiling of cotton to prevent the formation of oxycellulose.
Rongalit DP	Stabilised sulphoxylate derivative. Reducing agent for discharge and discharge-resist printing on PES, CA, CTA and their blends with PA.
Rongalit FD Liquid	Sodium salt of a sulphinic acid derivative. Reducing agent for direct printing with vat dyes and discharging agent for white and coloured discharges on dischargeable dyeings on cellulosic fibres and for pigment discharge printing.
Rongalit H Liquid	Calcium salt of hydroxymethanesulphinic acid. Reducing agent for white and coloured discharge printing on wool and silk. Its use entails no risk of corrosion of equipment, nor is there any need to use print thickenings that are stable to metal salts.
Rongalit 2PH-A **Rongalit 2PH-B Liquid**	Reducing agent combination of inorganic reducing agent (Rongalit 2PH-A) and aliphatic sulphonic acid derivative (Rongalit 2PH-B liquid) for two-phase printing with vat dyes.
Rongalit ST Liquid	Sodium salt of a sulphinic acid derivative. Discharging agent, chiefly for pigment discharge printing.
Setamol® WS	Naphthalenesulphonic acid-formaldehyde condensation product, anionic. Reduces staining of the white ground when prints produced with disperse dyes on CA, CTA, PA and PES are washed off.
Trilon® TA Liquid and Powder **Trilon TB Liquid and Powder**	Trilon TA = sodium salt of nitrilotriacetic acid. Trilon TB = sodium salt of ethylenediamine tetraacetic acid. Both Trilon grades form stable water-soluble complexes with alkaline earth and heavy metal ions. In the wash bath they prevent the formation of lime soap and other troublesome precipitates and deposits on the fabric caused by water-hardening salts, thus ensuring more brilliant prints, better fastness properties and a good fabric handle. The Trilon grades are also used to soften process water, to dissolve precipitates formed by water hardness salts and other metal compounds, and in dyeing with dyes that are sensitive to hardness salts or metal salts. The Trilon grades are particularly effective at elevated temperatures. The use of Trilon grades is particularly important when the prints have been produced with synthetic thickeners, e.g. Lutexal grades, or with alginate thickenings. For ecological reasons preference should be given to the Trilon TA grades.
Ultraphor® BN Liquid	Nonionic fluorescent brightening agent with bluish white tinge for polyester fibres unblended or in blends.
Ultraphor RN Liquid	Nonionic fluorescent brightening agent with reddish white tinge for polyester fibres unblended or in blends.
Ultraphor SFG Liquid	Nonionic fluorescent brightening agent with neutral to slightly greenish white tinge for polyester fibres unblended or in blends.
Ultraphor SFR Liquid	Nonionic fluorescent brightening agent with neutral to slightly reddish white tinge for polyester fibres unblended or in blends.
Uniperol® AC **Uniperol AC High Conc.**	Ethoxylated fatty amine, slightly cationic. Used in the reduction clearing of dyeings and prints produced with disperse dyes on polyester and triacetate.
Uniperol EL	Ethoxylation product of a vegetable oil, nonionic. Versatile dispersing, emulsifying and levelling agent in the dyeing and printing of textiles. Improves the washing-off properties of the carbonised cellulose components in burn-out prints. Acts as a dye-fixing agent in coloured burn-out prints produced with disperse dyes.

Vitexol® D	Mixture of long-chain alcohols with mineral oil and anionic and nonionic surfactants. Highly effective, low-odour defoamer for printing on synthetic fibres, for printing transfer papers and for printing with vat, reactive and other soluble or dispersed dyes.
Zetex® PN-AD*	Mixture of ethoxylated products and polyol. Auxiliary for alkaline discharges and discharge resists on polyester. Improves the white and coloured discharge effect, the sharpness of outline of illumination prints and the storage life of the printed, unfixed fabric.

* *BASF Curtex, L'Hospitalet de Le., Spain*

General survey

Sizing agents	
	Size grades Textile waxes
Pretreatment auxiliaries	
Wetting agents	Leophen grades
Wetting agents and detergents, nonionic	Laventin grades (APEO-free) Nekanil® LN (APEO-containing)
Wetting agent/detergent combinations	Kieralon grades
Extractants	Lufibrol® grades Lusynton® SE
Stabilisers in peroxide bleaching	Prestogen® grades
Complexing agents	Trilon grades
Peroxide killer	Basopal® PK
Reduction bleaching agents	Blankit® grades
Dyeing auxiliaries	
Wetting agents	Leophen grades
Dispersing agents and protective colloids	Dekol SN Setamol grades Uniperol grades
Levelling agents for cellulosic fibres	Albigen A Peregal® P Uniperol O Micropearl
Levelling agents for PAN	Basacryl® Salt grades
Levelling agents for CA and CTA	Uniperol grades
Levelling agents for PES	Palegal® grades Uniperol EL
Stripping an lightening agent	Albigen A
For wool, PA and CA	Uniperol AC Uniperol AC High Conc.
Reducing agents	Hydrosulphite BASF grades Rongal® grades
Oxidising agents	Ludigol Granules
Crease inhibitors	Palatex® grades Primasol® JET
Foam suppressants	Vitexol grades
Padding auxiliaries	Primasol grades

Aftertreatment agents for cellulosic fibres	Cyclanon grades Dekol SN Kieralon B High Conc.
Aftertreatment agents for PES	Cyclanon grades Uniperol grades
Complexing and sequestering agents for the dyebath	Dekol SAD Trilon TA Liquid
pH adjusters	Eulysin grades

Pigment printing auxiliaries

Emulsifier	Luprintol PE New
Emulsifier-containing compounds	Luprintol grades
Synthetic thickeners	Lutexal grades
Binders for pigment printing	Helizarin binders
Fastness promoters and handle modifiers	Luprimol grades
Crosslinking agents	Helizarin fixing agents
Defoamer	Defoamer TC*
Binder-containing auxiliary combinations for printing special effects	Helizarin Bronze Binder MT Helizarin Special Binder 4438
Rheology modifier	Lutexal HVW
Reducing agents for pigment discharges	Decrolin Rongalit FD Liquid Rongalit ST Liquid
Adhesives	Lubasin grades

Auxiliaries for printing with fibre-reactive dyes

Dye-dissolving and dispersing agents	Glyezin grades Setamol WS
Fixing agents and fixation accelerators	Luprintan grades Basilen Fixing Agent F-RP New
Foam suppressant	Vitexol D
Penetration and flushing agent in reactive printing	Glyezin BC
Resist agent	BASF Liquid Reactive Resist Agent
Reducing agents for direct and discharge printing on cellulosic fibres	Hydrosulphite BASF grades Rongalit C Rongalit FD Liquid
Reducing agents for 2-phase printing	Rongalit 2PH-A Rongalit 2PH-B Liquid
Reducing agents for discharge printing on synthetic fibres, wool, silk	Rongalit H Liquid Rongalit DP Decrolin
Oxidising agents	Ludigol grades

* *Sold by TENSID Chemie, Cologne*

Washing-off agents for textile printing	Albigen A Kieralon DB Setamol WS Trilon grades Uniperol grades
Adhesives	Lubasin grades
Auxiliary for printing transfer papers on textile printing machines	Luprintol FBT

Finishing agents

Crosslinking agents	Fixapret® grades Kaurit® grades
Catalysts	Condensol® grades
Additives, smoothing agents and softeners	Basosoft® grades Perapret® grades Siligen® grades
Filling and stiffening agents	Perapret® grades Texapret® AM
Water-repellent and oil-repellent agents	Persistol® grades Ramasit® KGT
Antistatic agent	Siligen APE
Hydrophilising agent	Lurotex® A25
Binders and auxiliaries for pigment printing	Helizarin Binder FWT Perapret PU Siligen FA Vitexol PFA

Fluorescent brightening agents

Fluorescent brightening agents for PES	Ultraphor® grades

Abbreviations of the commonest types of fibres

CA = acetate
CO = cotton
CTA = triacetate
CV = viscose
PA = polyamide
PAN = acrylic
PES = polyester

Note

The information submitted in this publication is based on our current knowledge and experience. In view of the many factors that may affect processing and application, these data do not relieve processors of the responsibility of carrying out their own tests and experiments; neither do they imply any legally binding assurance of certain properties or of suitability for a specific purpose. It is the responsibility of those to whom we supply our products to ensure that any proprietary rights and existing laws and legislation are observed.

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